

REMARKS

In the Office Action, the Examiner stated that claims 21-40 are in condition for allowance except for formal matters and suggested deletion of the term "predetermined" and substitution of the term --set-- in claims 21 and 36. The Examiner additionally suggested amending the term "thickening time increasing additive" to the term --retarder-- in all relevant claims. Consequently, Applicants hereby amend claims 21, 26, 27, 28, 36, and 38 in accordance with the Examiner's suggestions. Claims 21-40 as amended are in condition for allowance, and such action is respectfully requested.

This is intended to be a complete response to the Office Action mailed on November 20, 2001.

I hereby certify that this correspondence is being deposited in the United States Postal Service as first class mail in an envelope addressed to: Box Non-Fee Amendment, Commissioner for Patents, Washington D.C. 20231, on January 8th, 2002.

Dana Coots

Dana Coots

Date: January 8, 2002

Respectfully submitted,

C. Clark Dougherty Jr.

C. Clark Dougherty, Jr.

Registration No. 24,208

McAFEE & TAFT

Tenth Floor, Two Leadership Square

211 North Robinson

Oklahoma City, Oklahoma 73102

(405) 235-9621

Attorney for Applicants



Serial No. 09/854,857
HES 99.0350U1C1

VERSION WITH MARKINGS TO SHOW CHANGES MADE

21. (Amended) A foamed cement composition having a [predetermined] set pumping time and a quick set at temperatures as low as about 32°F comprising:

a calcium aluminate cement;

a set accelerating additive;

a [thickening time increasing additive] retarder;

water in an amount sufficient to form a foam; and

a mixture of cement composition foam forming and foam stabilizing surfactants present in an amount sufficient to facilitate the formation of and stabilize said foam.

26. (Amended) The cement composition of claim 1 wherein said [thickening time increasing additive] retarder is selected from the group consisting of citric acid, gluconic acid and tartaric acid.

27. (Amended) The cement composition of claim 1 wherein said [thickening time increasing additive] retarder is citric acid.

28. (Amended) The cement composition of claim 1 wherein said [thickening time increasing additive] retarder is present in said composition in an amount in the range of from about 0.5% to about 2% by weight of cement therein.

36. (Amended) A foamed cement composition having a [predetermined] set pumping time and a quick set at temperatures as low as about 32°F comprising:

a calcium aluminate cement having an alumina content of about 80% by weight of said cement;

RECEIVED
FEB 04 2002
TC 1700

a set accelerating additive selected from the group consisting of lithium chloride, lithium carbonate, lithium sulfate and lithium hydroxide present in said composition in an amount in the range of from about 0.2% to about 0.5% by weight of cement therein;

a [thickening time increasing additive] retarder selected from the group consisting of citric acid, gluconic acid and tartaric acid present in said composition in an amount in the range of from about 0.5% to about 1.5% by weight of cement therein;

water selected from the group consisting of fresh water and salt water present in said composition in an amount in the range of from about 40% to about 50% by weight of cement therein;

nitrogen gas present in said composition in an amount sufficient to foam said cement composition to a density in the range of from about 10 to about 12 pounds per gallon; and

a mixture of foam forming and foam stabilizing surfactants comprised of an alcohol ether sulfate ethoxylated with from about 3 to about 10 moles of ethylene oxide, an alkyl or alkene amidopropylbetaine and an alkyl or alkene amidopropyl dimethylamine oxide, said mixture being present in said composition in an amount in the range of from about 2% to about 3% by weight of water in said composition.

38. (Amended) The cement composition of claim 16 wherein said [thickening time increasing additive] retarder is citric acid.